## INFORMATION DISCLOSURE CITATION (Use several sheets if necessary)

		/o F					
Atty. Docket No.	07691.0009	O P P COR	Serial No.	09/580,	491		
Applicant Kurt HERTOGS et al. SEP 2 8 2000				-			
Filing Date	May 30, 2000		Group	1631		- · · - · - · - · - · - · - · - · - · -	
		U.S. PATENT D	OCUMENTS			· •	
Examiner Initial*	Document Number	Date	Name	Class	Sub Class	Filing Dat	
			<del></del>				
		FOREIGN PATENT	DOCUMENTS	<u>I</u>		<u> </u>	
	Document Number	Date	Country	Class	Sub Class	Translatio Yes or No	
No	WO 97/27480	07/31/97	PCT	C12Q	1/68	Yes	*
	OTHER DOCUMENTS	S (Including Autho	r, Title, Date, Perti	nent Pages	, Etc.)		
NG	Angarano et al., "Ge Regulators and Hon				Journal o	f Biological	
	Anton et al., "Compa and Plasma," 3 <sup>rd</sup> Int' Vol. 4, Supp. 1 (199	Workshop on HIV					
	Bethune et al., "Doe Inhibitors, Observed Workshop on HIV D	l in HIV-1 Groups M	(Subtypes A-H) and	d O, Differ fr	om Subty	pe B," 3 <sup>rd</sup> Int'l	9).
	Bloor et al., "Lamivu Novel Polymorphism Abstract 25, Vol. 4, 3	ns in RT," <u>3<sup>rd</sup> Int'l Wo</u>					
	Casado et al., "Rate Patients Failing a Ne HIV Drug Resistanc	evirapine Plus Prote	ase Inhibitor-Contai	ning Regime	en," 3 <mark>rd Int</mark>	<u>'I Workshop or</u>	<u> </u>
	Calvez, V., "Resista	nce to Antiretroviral	Drugs," Antiviral Th	erapy, 3(4),	pp. 5-7 (1	1998).	,
	Chen et al., "Drug R HIV-1 infection," <i>AID</i>			nenotypic Zio	dovudine	Resistance in	r
	Condra et al., Genot to Indinavir," <i>Antivira</i> and Eradication, Abs	al Therapy, 1st Intern	ational Workshop H				es /
126	Condra, Jon H., "Re Annals of Internal M			ability of An	tiretrovira	l Therapy,"	

<del>-</del>	
NG	D'Aquila, R.T., "HIV-1 Chemotherapy and Drug Resistance," Clin. Diagnost. Virol, 3, 299-3166 (1995).
	Deeks et al., "Novel Four-Drug Salvage Treatment Regimens After Failure of a Human Immunodeficiency Virus Type 1 Protease InhibitorContaining Regimen: Antiviral Activity and Correlation of Baseline Phenotypic Drug Susceptibility with Virologic Outcome," <i>The Journal of Infectious Disease</i> , 179, pp. 1375-1381(1999).
PEVC	Deeks et al., 2 <sup>nd</sup> Int'l Workshop on HIV Drug Resistance and Treatment Strategies, Lake Maggiore, Italy Abstr. 53 (1998).
SEP 2 8 2000 35	Eastman et al., "Comparison of Selective Polymerase Chain Reaction Primers and Differential Probe Hybridization of Polymerase Chain Reaction Products for Determination of Relative Amounts of Codon 215 Mutant and Wild-Type HIV-1 Populations," <i>J. Acq. Imm. Def. Syndr. Human Retrovirol.</i> , 9, 264-273 (1995).
THIS THE	Eastman et al., "Nonisotopic Hybridization Assay for Determination of Relative Amounts of Genotypic Human Immunodeficiency Virus Type 1 Zidovudine Resistance," <i>J. Clin. Micro.</i> , 33, 2777-2780 (1995).
	Esté et al., "HIV Phenotype & Genotype Data Highlights," 2 <sup>nd</sup> International Workshop on HIV Drug Resistance and Treatment Strategies, Lake Maggiore, Italy (1998).
	Fodor et al., "Multiplexed Biochemical Assays with Biological Chips," <i>Nature</i> , 364, 555-556 (1993).
	Gianotti et al., "Study on Mutations and Antiretroviral Therapy (SMART): Preliminary Results," <i>Antiviral Therapy, 4</i> (3), pp. 65-69 (1999).
	Gianotti et al., "The Rationale for a Study on HIV-1 Reverse Transcriptase Mutations and Outcome of Antiretroviral Therapy with Two Nucleoside Analogs," <i>Journal of Biological Regulators and Homeostatic Agents</i> , pp. 158-162 (1999).
	Gingeras et al., "Use of Self-Sustained Sequence Replication Amplification Reaction to Analyze and Detect Mutations in Zidovudine-Resistant Human Immunodeficiency Virus," <i>The Journal of Infectious Disease</i> , 164, 1066-1074 (1991).
	Hammer et al., "Relationship of Phenotyic and Genotypic Resistance Profiles to Virological Outcome in a Trial of Abacavir, Nelfinavir, Efavirenz and Adefovir Dipivoxil in Patients with Virological Failure Receiving Indinavir," 3 <sup>rd</sup> Int'l Workshop on HIV Drug Resistance and Treatment Strategies, Abstract 64, Vol. 4, Supp. 1 (1999).
	Harada et al., "Infection of HTLV-III/LAV in HTLV-1-Carrying Cells MT-2 and MT-4 and Application in a Plaque Assay," <i>Science</i> , 229, pp. 563-566 (1985).
	Harrigan et al., "Drug Resistance and Short Term Virological Response in Patients Prescribed Multidrug Rescue Therapy," 3 <sup>rd</sup> Int'l Workshop on HIV Drug Resistance and Treatment Strategies, Abstract 62, Vol. 4, Supp. 1 (1999).
	Hertogs et al.,. "Comprehensive HIV Drug Resistance Monitoring Using Rapid, High-Thoughput Phenotypic and Genotypic Assays with Correlative Data Analysis," Int'l Congress on Drug Therapy in HIV Infection, Abstracts OP3.4, Vol. 12, Supp. 4 (1998).
	Hertogs et al., "A Rapid Method of Simultaneous Detection of Phenotypic Resistance to Inhibitors of Protease and Reverse Transcriptase in Recombinant Human Immunodeficiency Virus Type 1 Isolates from Patients Treated with Antiretroviral Drugs," <i>Agents Chemother.</i> , 42, 269-276 (1998).
	Hertogs et al., "A Blinded Comparative Analysis of Two Genotyping Service Laboratories: Full Sequence Analysis of HIV-1 Protease and Reverse Transcriptase," 3 <sup>rd</sup> Int'l Workshop on HIV Drug Resistance and Treatment Strategies, Abstract 87, Vol. 4, Supp. 1(1999).
NG	Hertogs et al., "Common, Rare and New Genotypic and/or Phenotypic HIV-1 Resistance Profiles Observed in Routine Clinical Practice: A Survey of Over 5000 Isolates," 3 <sup>rd</sup> Int'l Workshop on HIV <u>Prug Resistance and Treatment Strategies</u> , Abstract 108, Vol. 4, Supp 1 (1999).

Nr	Hertogs et al., "Testing for HIV-1 Drug Resistance: New Developments and Clinical Implications," <u>Recent Res. Dev. Antimicrob. Agents Chemother.</u> , 3(Pt. 1), 83-104. (1999)
	Hertogs et al., "A Novel Human Immunodeficiency Virus Type 1 Reverse Transcriptase Mutational Pattern Confers Phenotypic Lamivudine Resistance in the Absence of Mutation 184V," <i>Antimicrob.</i> , <i>Agents Chemother.</i> , 44(3), 568-573 (2000).
	Hirsch et al., "Antiretroviral Drug Resistance Testing in Adults With HIV Infection," <i>JAMA</i> , 279(24), pp. 1984-1991 (1998).
# 10	Holodniy et al., "Determination of Human Immunodeficiency Virus RNA in Plasma and Cellular Viral DNA Genotypic Zidovudine Resistance and Viral Load During Zidovudine-Didanosine Combination, Therapy," <i>Journal of Virology</i> ., 69, 3510-3516 (1995).
SEP 2 8 2000 25	Jopour et al., "Standardized Peripheral Blood Mononuclear Cell Culture Assay for Determination of Drug Susceptibilities of Clinical Human Immunodeficiency Virus Type 1 Isolates," <i>Antimicrob. Agents Chemother.</i> , 37, 1095-1101 (1993).
SATEME & TRADE	Kellam et al., "Recombinant Virus Assay: A Rapid, Phenotypic Assay for Assessment of Drug Susceptibility of Human Immunodeficiency Virus Type 1 Isolates," <i>Antimicrobial Agents and Chemotherapy</i> , pp. 23-30 (1994).
	Kempf et al., "Analysis of Virological Response to ABT-378/Ritonavir Therapy in Protease Inhibitor-Experienced Patients with Respect to Baseline Viral Phenotype and Genotype," 3 <sup>rd</sup> Int'l Workshop on HIV Drug Resistance and Treatment Strategies, Abstract 8, Vo. 4, Supp. 1 (1999).
	Kemp et al., "Analysis of 5000 HIV-1 Clinical Samples Reveals Complex Non-nucleoside RT Inhibitor Resistance Patterns," 3 <sup>rd</sup> Int'l Workshop on HIV Drug Resistance and Treatment Strategies, Abstract 26, Vol. 4, Supp. 1 (1999).
	Kuritzkes, Daniel R., "HIV Resistance to Current Therapies," <i>Antiviral Therapy</i> , 2(3), pp. 61-67 (1997).
	Kusimi et al., "Human Immunodeficiency Virus Type 1 Envelope Gene Structure and Diversity In Vivo and after Cultivation In Vivo," <i>J. Virol.</i> , 66, 875-885 (1992).
	Larder et al., "A Complete Survey, in Over 1,500 Clinical HIV-1 Isolates, of Phenotypic and Genotypic Protease Inhibitor Resistance Profiles (Including Gag Cleavage Site Sequences) and Their Relation to Therapy History," Int'l Congress on Drug Therapy in HIV Infection, Abstracts OP3.5, Vol. 12, Supp. 4 (1998).
	Larder et al., "A Family of Insertion Mutations Between Codons 67 and 70 of Human Immunodeficiency Virus Type 1 Reverse Transcriptase Confer Multinucleoside Analog Resistance," <i>Antimicrob. Agents Chemother.</i> , 43(8), 1961-1967 (1999).
	Larder et al., "Tipranavir is Active Against a Large Selection of Highly Protease Inhibitor-Resistant HIV-1 Clinical Samples," 3 <sup>rd</sup> Int'l Workshop on HIV Drug Resistance and Treatment Strategies, Abstract 5, Vol. 4, Supp. 1 (1999).
	Larder et al., "HIV with Reduced Sensivity to Zidovudine (AZT) Isolated During Prolonged Therapy," <i>Science</i> , 243, 1731-1734 (1989).
	Larder, et al., "Predicting HIV-1 Phenotypic Resistance from Genotype Using a Large Phenotype-Genotype Relational Database," 3 <sup>rd</sup> Int'l Workshop on HIV Drug Resistance and Treatment Strategies, Abstract 59, Vol. 4, Supp. 1 (1999).
	Larder et al., "Zidovudine Resistance Predicted by Direct Detection of Mutations in DNA from HIV-Infected Lymphocytes," <i>AIDS</i> , 5, 137-144 (1991).
NG	Leigh-Brown et al., "Associations Between Amino Acids in the Evolution of HIV Type 1 Protease Sequences Under Indinavir Therapy," <i>AIDS Research and Human Retroviruses</i> ," 15(3), pp. 247-253 (1999).

<del></del>	
No	Lennerstrand et al., "Mechanism of Zidovudine and Stavudine Resistance for HIV-1 RT with Amino Acid Insertions Between Codons 68 and 70," 3 <sup>rd</sup> Int'l Workshop on HIV Drug Resistance and Treatment Strategies, Abstract 32, Vol. 4, Supp. 1 (1999).
	Leriche-Guerin et al., "Correlation Between Antiretroviral Resistance Mutations, Biological Parameters, and Clinical Evolution in Zidovudine-Treated Patients Infected with Human Immunodeficiency Virus Type 1," <i>Eur. J. Clin. Microbiol. Infect. Dis.</i> , 16, pp. 660-668 (1997).
	Lorenzi et al., "Impact of Drug Resistance Mutations on Virologic Response to Salvage Therapy," , AIDS, 13, pp. F17-F21 (1999).
QE JCG	Miller et al., "Phenotypic Susceptibility to Adefovir Dipivoxil in Clinical Samples with Defined RT Genotypic Resistance Patterns," 3 <sup>rd</sup> Int'l Workshop on HIV Drug Resistance and Treatment Strategies, Abstract 40, Vol. 4, Supp. 1 (1999).
SP 2 8 2000 25	Miller et al., "Correlates of Resistance to Individual Nucleoside Drugs in Patients who Have Never Taken Them," 3 <sup>rd</sup> Int'l Workshop on HIV Drug Resistance and Treatment Strategies, Abstract 41, Vol. 4, Supp. 1 (1999).
TENT & TRANS	Miller et al., "Prevalence of Baseline Drug Resistance Mutations in Primary HIV Infection Patients from the QUEST Study," 3 <sup>rd</sup> Int'l Workshop on HIV Drug Resistance and Treatment Strategies, Abstract 141, Vol. 4, Supp. 1 (1999).
	Moyle, G., "Current Knowledge of HIV-1 Reverse Transcriptase Mutations Selected During Nucleoside Analogue Therapy: The Potential to Use Resistance Data to Guide Clinical Decisions," <i>Journal of Antimicrobial Chemotherapy</i> , 40, pp. 765-777 (1997).
	Pauwels et al., 2 <sup>nd</sup> Int'l Workshop on HIV Drug Resistance and Treatment Strategies, Lake Maggiore, Italy, Abstr. 51 (1998).
	Pauwels et al., "Rapid and Automated Tetrazolium-based Colorimetric Assay for the Detection of Anti-HIV Compounds," <i>J. Virol. Methods</i> , 20, 309-321 (1998).
	Perez-Olmeda et al., "Usefulness of Genotypic Analysis of Resistance to Nucleoside Analogues in the Clinical Setting," <i>Eur. J. Clin. Microbrial Infect. Dis.</i> , 18, pp. 448-449 (1999).
·	Piketty et al., "Efficacy of a Five-Drug Combination Including Ritonavir, Saquinavir and Efavirenz in Patients Who Failed on a Conventional Triple-Drug Regimen: Phenotypic Resistance to Protease Inhibitors Predicts Outcome of Therapy," <i>AIDS</i> , 13, pp. F71-F77 (1999).
	Ren et al., "Crystal Structures of HIV-1 RT Inhibitor Complexes: Second Generation' NNRTIs, Efavirenz and S-1153 (AG1549), and NNRTI- and NRTI-resistant Mutant Forms," 3 <sup>rd</sup> Int'l Workshop on HIV Drug Resistance and Treatment Strategies, Abstract 20, Vol. 4, Supp. 1 (1999).
	Richman et al., "Detection of Mutations Associated with Zidovudine Resistance in Human Immunodeficiency Virus by Use of the Polymerase Chain Reaction," <i>The Journal of Infectious Disease</i> , 164, 1075-1081 (1991).
	Schapiro et al., "Clinical Cross-Resistance Between the HIV-1 Protease Inhibitors Saquinavir and Indinavir and Correlations with Genotypic Mutations," <i>AIDS</i> , 13, pp. 359-365 (1999).
	Schinazi et al., "Mutations in Retroviral Genes Associated with Drug Resistance," <i>Int. Antiviral News</i> , 5, 129-142 (1997).
	Schmit et al., "Recent Advances in Antiretroviral Therapy and HIV Infection Monitoring," Intervirology, 40, pp. 304-321 (1997).
Mr	Stuyver et al., "Line Probe Assay for Rapid Detection of Drug-Selected Mutations in the Human Immunodeficiency Virus Type 1 Reverse Transcriptase Gene," <i>Antimicrob. Agents Chemotherap.</i> , § 41, 284-291 (1997).
	Vandamme et al., "Managing Resistance to Anti-HIV Drugs," <i>Drugs</i> , pp. 337-361 (1999).

4				
NS	Vella, S., "Advances in the Virology of F Aids Clinical Care, 10(3), pp. 17-19 (19	HIV Infection and Implications for Clinical Management, 98).		
	Vingerhoets et al., "The Accuracy and Reprorucibility of High Throughput Genotypic and Phenotypic HIV-1 Resistance Testing Under EN45001 and CLIA Accreditation Labels," 3 <sup>rd</sup> Int'l Workshop on HIV Drug Resistance and Treatment Strategies, Abstract 77, Vol. 4, Supp. 1 (1999).			
	Resistance in 230 HIV-1-Positive Antire	spective Survey Assessing the Prevalence of HIV-1 Drug troviral-Naive Patients from the USA, 3 <sup>rd</sup> Int'l Workshop on rategies, Abstract 122, Vol. 4, Supp. 1 (1999).		
P JCES	Walter et al., "Rapid, Phenotypic HIV-1 Drug Sensitivity Assay for Protease and Reverse Transcriptase Inhibitors," <i>Journal of Clinical Virology</i> , 13, pp. 71-80 (1999).			
2Eb 1 8 5000 52	Weber et al., "Molecular Mechanics Analysis of Drug-Resistant Mutants of HIV Protease," <i>Protein Engineering</i> , 12(6), pp. 469-474 (1999).			
COTEMT & TRADE	Wegner et al., "The Potential Role of Resistance Testing and Therapeutic Drug Monitoring in the Optimization of Antiretroviral Drug Therapy," 3 <sup>rd</sup> Int'l Workshop on HIV Drug Resistance and Treatment Strategies, Abstract 112, Vol. 1. Supp. 1 (1999).			
		ectroviral Drug Resistance in HIV-1 From Recently Int'l Workshop on HIV Drug Resistance and Treatment (1999).		
	Winters et al., "Human Immunodeficiency Virus Type 1 Reverse Transcriptase Genotype and Drug Susceptibility Changes in Infected Individuals Receiving Dideoxyinosine Monotherapy for 1 to 2 Years, " <i>Antimicrohbial Agents and Chemotherapy</i> , pp. 757-762 (1997).			
	Yahl et al., "Mutation Patterns of the Reverse Transcriptase and Protease Genes in Human Immunodeficiency Virus Type 1-Infected Patients Undergoing Combination Therapy: Survey of 787 Sequences," <i>Journal of Clinical Microbiology</i> , pp. 4099-4106 (1999).			
	of Virological Response to Saquinavir/R	ypic, Genotypic and Clinical/Treatment History Predictors kitonavir Salvage Therapy in a Clinic-based Cohort," 3rd and Treatment Strategies, Abstract 68, Vol. 4, Supp. 1,		
Alv.	Zolopa et al., "HIV-1 Genotypic Resistance Patterns Predict Response to SaquinavirRitonavir Therapy in Patients in Whom Previous Protease Inhibitor Therapy had Failed," <i>Ann Intern Med.</i> , 131, pp. 813-821 (1999).			
Examiner Mikolai Golikury		Date Considered/1.30.97 04/24/02		
*Examiner: Initial throu	if reference considered, whether or not c	itation is in conformance with MPEP 609; draw line considered. Include copy of this form with next		
Form PTO 1449 Patent and Trademark Office - U.S. Department of Commerce				